

Kardindex Sheets

No. 28



**ORGANIC
CHEMICALS**

**WINTER
1967**

Our Latest Listings of —

Organic Intermediates ● Biochemical Tools ● Reagent Chemicals
Analytical Tools ● Organo-metallics —

Each chemical is carefully analyzed and stocked for your convenience

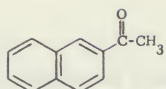
IT ALL STARTED WITH SEAWEED



The preparation of agar from the pectic layers of seaweeds commonly found in Japan was described (1) at a time when agar was still believed to be a single polysaccharide. Later work established the existence of at least two polysaccharides in commercial agar - one neutral, called agarose, another containing sulfate ester groups called agaropectin (2). The use of agar as a stabilizing medium for electrophoresis is extensive (3). An observation on the molecular sieving properties of starch seemed of limited use (4); nevertheless it was the start of a revolution. On the one hand cross-linked dextran gels, later marketed under the trade name of Sephadex gels, were used for the gel filtration of proteins, peptides and amino acids (5), on the other hand agar gels of 2.5 to 15% agar content, sieved to pass 60 mesh, were

used to sort proteins with molecular weights ranging from 13,000 to 8.6×10^6 (6). Agar or agarose satisfactorily resolved dextrans, important as blood extenders, which could not be resolved on Sephadex G-50 or polyacrylamide columns (7). The use of polyacrylamide gels for molecular sieving was a recent development at the time (8,9). Exclusion chromatography was used to study albumin monomer and polymers (10). The introduction of thin-layer gel filtration was an important advance (11,12). The estimation of molecular weights by gel filtration on Sephadex and agar columns was a natural sequence of earlier studies (13-18). One of the attractive features of the procedure is that the proteins need not be pure (19). The range of the method on Sephadex G-200 now extends from molecular weight 40,000 to 500,000, depending on the degree of swelling of the gel (16). The development of a new method of preparing agarose from agar (20) led to the observation that gels prepared from this polysaccharide vastly extended the range of particle sizes which could be sorted by molecular sieving so that particulate fractions like bacteriophage T₂, ribosomes and mitochondria could be obtained as bands and be separated from proteins and substances of low molecular weight (21). Another method of preparing agarose (22) and a procedure for permitting agarose (or agar) to gel in spherical form in an organic phase (23), gave much more uniform material in the form of spheres, 0.05 mm diameter. Pearl-condensed agar satisfactorily resolved various animal viruses in chromatographic columns (24). A de luxe refinement is the use of automation (25). In addition to earlier papers there have been other attempts to present a theory of gel filtration (26) and to use gel filtration in studies of interacting systems (27,28). Another special use is the preparation of covalently linked enzymes derivatives of Sephadex (29). The subject of gel chromatography has been reviewed in 1964 (30).

No. 13,477-5 Empirical Formula $C_{12}H_{10}O$
 Name 2'-Acetonaphthone
 (methyl 2-naphthyl ketone)
 M. W. 170.21
 Description and Constants
 Off-white crystals
 m.p. $53-55^{\circ}$

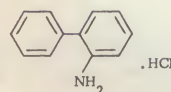


Literature Functional Groups K-3

Handling and Shipping Catalog 13 item.
 Price 100 g. - \$3.50 500 g. - \$13.50 (Relisted. Formerly M5860)
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,508-9 Empirical Formula $C_{12}H_{11}N$
 Name 2-Aminobiphenyl
 (2-biphenylamine) hydrochloride, 90+%, remainder inorganic salts
 M. W. 205.69
 Description and Constants
 Brown powder
 m.p. 209° (dec.)



Literature Functional Groups Am II

Handling and Shipping Carcinogen. Handle with great care.
 Price 100 g. - \$4.00 500 g. - \$12.00 Catalog 13 item.
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,596-8 Empirical Formula C_2H_3BrO
 Name Acetyl bromide
 M. W. 122.95
 Description and Constants
 Colorless liquid
 n_D^{20} 1.4486
 b.p. $75-77^{\circ}$

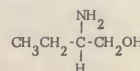


Literature Functional Groups AH

Handling and Shipping Irritating to the eyes. Violently decomposed by water or alcohol.
 Price 100 g. - \$3.75 500 g. - \$13.50
 Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,252-7 Empirical Formula $C_4H_{11}NO$
 Name d-2-Amino-1-butanol
 M. W. 89.14
 Description and Constants
 Colorless liquid
 n_D^{20} 1.4522
 b.p. $172-174^{\circ}$
 $[\alpha]_D^{20} + 9.64^{\circ}$ (neat)
 v.p.c. 98%

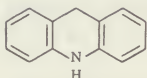


Literature Functional Groups Am I
 OH-1

Beil. 4, 291 (438)
 Handling and Shipping (Catalog 13 item)
 Price 1 g. - \$6.00 5 g. - \$18.00
 Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,089-3 Empirical Formula $C_{13}H_{11}N$
 Name Acridan
 M. W. 181.24
 Description and Constants
 Tan crystals
 m.p. $168-172^{\circ}$

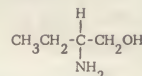


Literature Functional Groups Am III-4

Handling and Shipping Shipped in ampules under nitrogen.
 Price 10 g. - \$5.00 50 g. - \$15.00 Catalog 13 item.
 Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,251-9 Empirical Formula $C_4H_{11}NO$
 Name 1-2-Amino-1-butanol
 M. W. 89.14
 Description and Constants
 Colorless liquid
 n_D^{20} 1.4520
 b.p. $172-174^{\circ}$
 $[\alpha]_D^{20} - 10.1^{\circ}$ (neat)
 v.p.c. 99+%

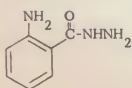


Literature Functional Groups Am I
 OH-1

Beil. 4, 291 (438)
 Handling and Shipping (Catalog 13 item)
 Price 1 g. - \$4.00 5 g. - \$12.00
 Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,650-6 Empirical Formula $C_7H_9N_3O$
 Name o-Aminobenzoyl hydrazide
 (anthranilic acid hydrazide)
 M. W. 151.17
 Description and Constants
 White crystals
 m.p. $119.5-121.5^{\circ}$
 Titration 98.5%

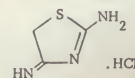


Literature Functional Groups Am II
 Hz

Handling and Shipping
 Price 25 g. - \$5.00 100 g. - \$15.00
 Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,318-3 Empirical Formula $C_3H_5N_3S$
 Name 2-Amino-4-imino-2-thiazoline hydrochloride
 M. W. 151.62
 Description and Constants
 Off-white powder
 m.p. $>230^{\circ}$ (dec.)



Literature Functional Groups Am III-4
 S-1

Handling and Shipping
 Price 10 g. - \$8.00 50 g. - \$24.00
 Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



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WINTER 1967

No. 13,610-7

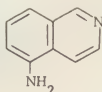
Empirical Formula $C_9H_8N_2$

Name 5-Aminoisoquinoline

M. W. 144.18

Description and Constants
Yellow crystals

Titration 99.5%

Literature
Beil. 22, 452

Functional Groups Am III-4

Handling and Shipping

Price 1 g. - \$ 4.00 5 g. - \$10.00 Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,719-1

Empirical Formula $C_{11}H_{18}N_2$

Name N'-Benzyl-N,N-dimethylethylenediamine, tech.

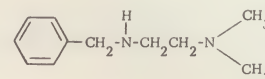
M. W. 178.28

Description and Constants

Colorless liquid

 n_D^{20} 1.5089

b.p. 122-124°/11 mm.



Literature

Functional Groups Am I

Handling and Shipping

Price 5 g. - \$7.00 25 g. - \$21.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,656-5

Empirical Formula $C_7H_{14}N_2O$

Name N-(3-Aminopropyl)-2-pyrrolidinone

M. W. 142.20

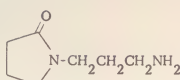
Description and Constants

Colorless liquid

 n_D^{20} 1.4977

b.p. 120-123°/0.2 mm.

Titration 99%



Literature

Functional Groups Am I
AA

Handling and Shipping

Price 25 g. - \$8.00 100 g. - \$19.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,329-9

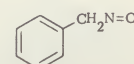
Empirical Formula C_8H_7N Name Benzyl isocyanide
(benzyl isonitrile)

M. W. 117.15

Description and Constants

Colorless liquid

b.p. 105-106°/75 mm.



Literature

Beil. 12, 1041

Functional Groups N

Handling and Shipping Very unpleasant odor. Handle with adequate ventilation.

Price 1 g. - \$5.50 5 g. - \$18.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,088-5

Empirical Formula $C_{10}H_{10}N_2$

Name 8-Aminoquinoline

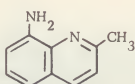
M. W. 158.20

Description and Constants

Light green crystals

m.p. 54-56°

Titration 99.6%

Literature
Beil. 22, 454Functional Groups Am II
Am III-4

Handling and Shipping

Price 1 g. - \$3.00 5 g. - \$10.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,513-5

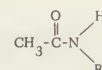
Empirical Formula C_2H_4BrNO Name N-Bromoacetamide
(NBA)

M. W. 137.97

Description and Constants
White powder

m.p. 108-109°

A source of active bromine.



Literature

Functional Groups AA

Handling and Shipping

Price 100 g. - \$ 5.00 500 g. - \$20.00 Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,072-9

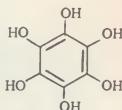
Empirical Formula $C_6H_6O_6$ Name Benzenhexol
(hexahydroxybenzene)

M. W. 174.11

Description and Constants

Grey powder

m.p. > 300°

Literature
Beil. 6, 1198 (592)

Functional Groups P

Handling and Shipping

Price 5 g. - \$10.75 10 g. - \$18.50

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 10,922-3

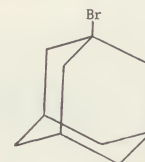
Empirical Formula $C_{10}H_{15}Br$

Name 1-Bromoadamantane

M. W. 215.14

Description and Constants
White crystals

m.p. 120-120.5°



Literature

Functional Groups Hal-3

Handling and Shipping

Price 10 g. - \$ 3.00 50 g. - \$10.00 Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,805-2 Empirical Formula $C_8H_7BrClNO$

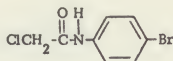
Name 4'-Bromo-2-chloroacetanilide

M. W. 248.51

Description and Constants

White crystals

m.p. 178-182°



Literature
Bell, 12, 643 (319)

Functional Groups AA
Hal-1
Hal-2

Handling and Shipping

Price 10 g. - \$7.00 25 g. - \$14.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,091-5 Empirical Formula C_6H_5BrO

Name o-Bromophenol

M. W. 173.01

Description and Constants

Yellow liquid

n_D^{20} 1.5892

b.p. 195°



Literature

Functional Groups Hal-2
P

Handling and Shipping

Price 10 g. - \$3.00 50 g. - \$12.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



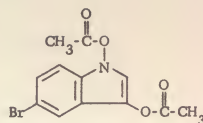
No. 13,506-2 Empirical Formula $C_{12}H_{10}BrNO_4$

Name 5-Bromoindoxyl diacetate
(5-bromo-1,3-diacetoxyindole)

M. W. 312.13

Description and Constants
White powder

m.p. 117-120°



Literature

Functional Groups Ind
Es
Hal-2

Handling and Shipping

Price 1 g. - \$20.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,525-9 Empirical Formula $C_{21}H_{21}Br_2P$

Name (3-Bromopropyl)-triphenylphosphonium bromide

M. W. 464.19

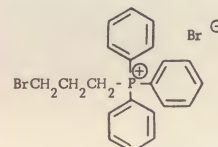
Description and Constants

White crystals

m.p. 230-231°

Titration 98.8%

A Wittig reagent



Literature

Functional Groups Hal-1
Phos

Handling and Shipping

Price 25 g. - \$6.50 100 g. - \$16.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,470-8 Empirical Formula $C_3H_6BrNO_4$

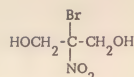
Name 2-Bromo-2-nitro-1,3-propanediol
(bronopol)

M. W. 200.00

Description and Constants
White crystals

m.p. 130-133°

Used as an antibacterial agent.



Literature

Functional Groups Hal-1
OH-1
Nit

Handling and Shipping

Price 25 g. - \$6.50 100 g. - \$18.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



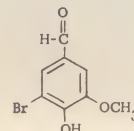
No. 13,060-5 Empirical Formula $C_8H_7BrO_3$

Name 5-Bromovanillin

M. W. 231.05

Description and Constants
White crystals

m.p. 162-165°



Literature
Bell, 8, 260

Functional Groups A-2
Et-3
Hal-2
P

Handling and Shipping

Price 25 g. - \$5.00 100 g. - \$15.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,556-3 Empirical Formula C_5H_9BrO

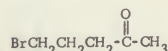
Name 5-Bromo-2-pentanone

M. W. 165.03

Description and Constants
Purple liquid

b.p. 120°/90 mm.

v.p.c. 99%



Literature
Bell, 1, 678

Functional Groups Hal-1
K-1

Handling and Shipping

Price 25 g. - \$8.50 100 g. - \$28.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,061-3 Empirical Formula $C_9H_9BrO_3$

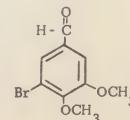
Name 5-Bromoveratraldehyde

M. W. 245.08

Description and Constants

Off-white powder

m.p. 63-64°



Literature
Bell, 8, 260

Functional Groups A-2
Et-3
Hal-2

Handling and Shipping

Price 5 g. - \$5.00 25 g. - \$15.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



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WINTER 1967

No. 13,450-3

Empirical Formula $C_8H_{15}NO_4$

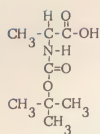
Name N-(tert.-Butoxycarbonyl)-DL-alanine

M. W. 189.21

Description and Constants

White powder

m.p. 109-110°



Literature

Functional Groups Pep

Handling and Shipping

Price 1 g. - \$10.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,455-4

Empirical Formula $C_{14}H_{19}NO_4$

Name N-(tert.-Butoxycarbonyl)-DL-phenylalanine

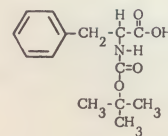
M. W. 265.31

Description and Constants

White powder

m.p. 143°

Titration 100%



Literature

Functional Groups Pep

Handling and Shipping

Price 1 g. - \$14.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,451-1

Empirical Formula $C_8H_{15}NO_4$

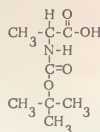
Name N-(tert.-Butoxycarbonyl)-L-alanine

M. W. 189.21

Description and Constants

White powder

m.p. 73-76°



Literature

Functional Groups Pep

Handling and Shipping

Price 1 g. - \$14.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,457-0

Empirical Formula $C_{10}H_{17}NO_4$

Name N-(tert.-Butoxycarbonyl)-L-proline

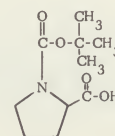
M. W. 215.25

Description and Constants

White crystals

m.p. 132-134°

Titration 100%



Literature

Functional Groups Pep

Handling and Shipping

Price 1 g. - \$14.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,453-8

Empirical Formula $C_7H_{13}NO_4$

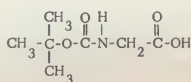
Name N-(tert.-Butoxycarbonyl)-glycine

M. W. 175.18

Description and Constants

White powder

m.p. 87-88°



Literature

Functional Groups Pep

Handling and Shipping

Price 1 g. - \$10.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,328-0

Empirical Formula C_5H_9N Name n-Butyl isocyanide
(n-butyl isonitrile)

M. W. 83.13

Description and Constants

Colorless liquid



Literature

Functional Groups N

Handling and Shipping Very unpleasant odor. Handle with adequate ventilation.

Price 1 g. - \$5.50 5 g. - \$18.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,454-6

Empirical Formula $C_{11}H_{21}NO_4$

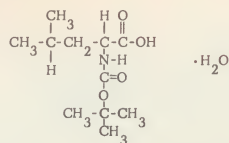
Name N-(tert.-Butoxycarbonyl)-L-leucine monohydrate

M. W. 249.31

Description and Constants

White powder

m.p. 80-85°



Literature

Functional Groups Pep

Handling and Shipping

Price 1 g. - \$12.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,530-5

Empirical Formula $C_{24}H_{24}N_2$

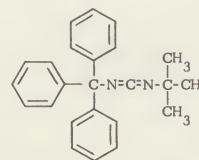
Name N-tert.-Butyl-N'-(triphenylmethyl)-carbodiimide

M. W. 340.47

Description and Constants

Pale yellow crystals

m.p. 71-73°



Literature

Functional Groups

Handling and Shipping

Price 5 g. - \$9.00 25 g. - \$35.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,458-9

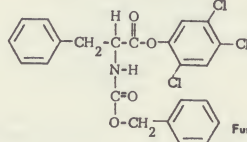
Empirical Formula $C_{23}H_{18}Cl_3NO_4$

Name N-(Carbobenzoxy)-L-phenylalanine 2,4,5-trichlorophenyl ester

M. W. 478.76

Description and Constants
White powder

m.p. 139-141°



Literature

Functional Groups
Pep.
Hal-2

Handling and Shipping

Price 1 g. - \$10.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,558-5

Empirical Formula $C_7H_5ClO_2$

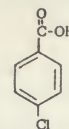
Name 4-Chlorobenzoic acid

M. W. 156.57

Description and Constants

White powder

m.p. 239-241°



Literature

Functional Groups
Ca-2
Hal-2

Handling and Shipping

Price 50 g. - \$5.00 250 g. - \$15.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,666-2

Empirical Formula $C_{11}H_9NO_4$

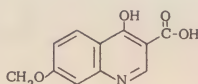
Name 3-Carboxy-4-hydroxy-7-methoxyquinoline

M. W. 219.20

Description and Constants

Tan powder

m.p. 266° (dec.)



Literature

J. Am. Chem. Soc. 68, 1268 (1946)

Functional Groups
Am III-4
Ca-4
Et-3
OH-3

Handling and Shipping

(Formerly C1302)

Price 5 g. - \$10.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



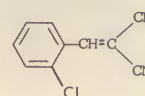
No. 13,093-1

Empirical Formula $C_{10}H_5ClN_2$ Name o-Chlorobenzylidenemalononitrile, moist
(contains approx. 30% water)

M. W. 188.62 (dry)

Description and Constants

Tan powder



Literature

Functional Groups
Hal-2
N

Handling and Shipping

Price 10 g. - \$3.00 50 g. - \$10.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,667-0

Empirical Formula $C_{10}H_6N_2O_5$

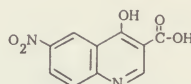
Name 3-Carboxy-4-hydroxy-6-nitroquinoline

M. W. 234.17

Description and Constants

Green-brown powder

m.p. 288-292° (dec.)



Literature

Functional Groups
Am III-4
Ca-4
OH-3
Nit

Handling and Shipping

(Formerly C1315)

Price 5 g. - \$10.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,534-8

Empirical Formula $C_{15}H_{23}ClN_2O_2$

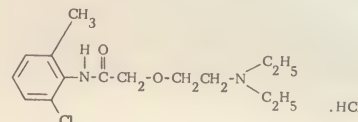
Name 6'-Chloro-2-(2-diethylaminoethoxy)-o-acetotoluidide hydrochloride

M. W. 335.28

Description and Constants

White crystals

m.p. 129-131°



Literature

Functional Groups
Am 1
AA
Et-1
Hal-2

Handling and Shipping

Price 5 g. - \$5.00 25 g. - \$18.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,557-7

Empirical Formula $C_7H_5ClO_2$

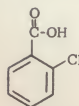
Name 2-Chlorobenzoic acid

M. W. 156.57

Description and Constants

White powder

m.p. 136-137°



Literature

Functional Groups
Ca-2
Hal-2

Handling and Shipping

Price 500 g. - \$6.00 2 Kg. - \$16.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,319-1

Empirical Formula $C_{11}H_9ClO$

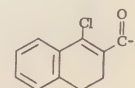
Name 1-Chloro-3,4-dihydro-2-naphthalenecarboxaldehyde

M. W. 192.65

Description and Constants

Yellow to brown solid

Titration 95.3%



Literature

Functional Groups
A-3
Hal-3

Handling and Shipping

Price 5 g. - \$7.00 25 g. - \$21.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,055-9

Empirical Formula $C_{10}H_{13}ClO$ Name p-Chloro- α,α -dimethylphenethyl alcohol

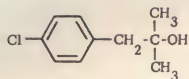
M. W. 184.67

Description and Constants

Yellow liquid

 n_D^{20} 1.5310

v.p.c. 994%

Functional Groups OH-1
Hal-2

Literature

Handling and Shipping

Price 25 g. - \$4.00 100 g. - \$10.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. C5200-4

Empirical Formula $C_8H_7ClN_2$

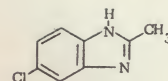
Name 5-Chloro-2-methylbenzimidazole

M. W. 166.61

Description and Constants

Brown powder

m.p. 198-201°



Literature

Beil. 23, 146

Handling and Shipping

(Relisted chemical)

Price 25 g. - \$7.00 100 g. - \$19.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



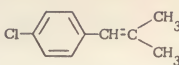
No. 13,039-7

Empirical Formula $C_{10}H_{11}Cl$ Name 4-Chloro- β,β -dimethylstyrene

M. W. 166.65

Description and Constants

Colorless liquid

 n_D^{20} 1.5543

Functional Groups Hal-2

Literature

Handling and Shipping

Price 10 g. - \$4.00 50 g. - \$12.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,461-9

Empirical Formula $C_{11}H_{10}ClNO_2$

Name 5-Chloro-2-methyl-3-indoleacetic acid

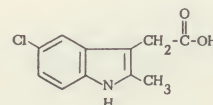
M. W. 223.66

Description and Constants

Tan powder

m.p. 192-194°

Titration 100%



Literature

Functional Groups Ca-1
Ind
Hal-2

Handling and Shipping

Price 1 g. - \$10.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,621-2

Empirical Formula $C_{13}H_8ClFO$

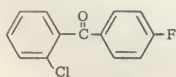
Name 2-Chloro-4'-fluorobenzophenone

M. W. 234.66

Description and Constants

White crystals

m.p. 60-62°

Functional Groups Hal-2
K-2

Literature

Handling and Shipping

Price 25 g. - \$9.25 100 g. - \$25.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,565-8

Empirical Formula $C_4H_6ClNO_2$

Name 5-Chloromethyl-2-oxazolidinone

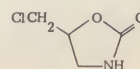
M. W. 135.55

Description and Constants

White crystals

m.p. 104-105°

Titration 98%



Literature

Functional Groups Am III-4
Hal-1

Handling and Shipping

Price 5 g. - \$4.25 25 g. - \$12.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,515-1

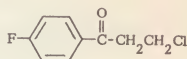
Empirical Formula C_9H_8ClFO Name β -Chloro-p-fluoropropiophenone

M. W. 186.61

Description and Constants

White crystals

m.p. 47-47.5°

Functional Groups Hal-1
Hal-2
K-3

Literature

Handling and Shipping

Price 25 g. - \$8.50 100 g. - \$24.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,096-6

Empirical Formula $C_8H_6Cl_2O$ Name α -Chlorophenylacetyl chloride

M. W. 189.04

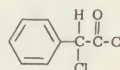
Description and Constants

Light pink liquid

 n_D^{20} 1.5388

b.p. 120°/23 mm.

v.p.c. 99%



Literature

Beil. 9, 449 (180)

Functional Groups AH
Hal-1

Handling and Shipping

Price 10 g. - \$3.00 50 g. - \$10.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,887-7 Empirical Formula $C_{15}H_{10}Cl_2O_3$

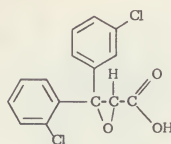
Name 3-(o-Chlorophenyl)-3-(m-chlorophenyl)-glycidic acid

M. W. 309.15

Description and Constants
Tan powder

m.p. 98.5° (dec.)

Titration 97%



Literature

Functional Groups Ca-1
Et-4
Hal-2

Handling and Shipping

Price 1 g. - \$13.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,320-5

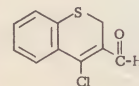
Empirical Formula $C_{10}H_7ClOS$

Name 4-Chloro-2H-thiochromene-3-carboxaldehyde

M. W. 210.68

Description and Constants
Brown solid

m.p. $36-37^{\circ}$



Literature

Functional Groups A-3
Hal-5
S-1

Handling and Shipping

Price 1 g. - \$ 4.00 5 g. - \$12.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,905-4

Empirical Formula $C_7H_5ClF_2S$

Name p-Chlorophenyl difluoromethyl sulfide

M. W. 194.63

Description and Constants
Colorless liquid

n_D^{20} 1.5329

b.p. 52° /1 mm.

v.p.c. 99%

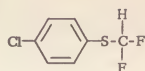
Literature
Bull. Soc. Chim. Belges 74, 270 (1965)

Functional Groups Hal-1
Hal-2
S-1

Handling and Shipping

Price 5 g. - \$ 9.00 25 g. - \$27.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,524-0

Empirical Formula $C_{24}H_{40}O_5$

Name Cholic acid

M. W. 408.58

Description and Constants
White powder

m.p. $200-201^{\circ}$

$[\alpha]_D^{20} + 39.1^{\circ}$ (c:0.6, 95% C_2H_5OH)

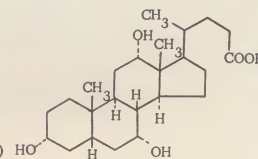
Literature

Functional Groups Ca-1
OH-1
Ster

Handling and Shipping

Price 50 g. - \$3.25 250 g. - \$12.50

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,594-1

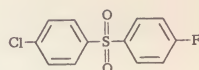
Empirical Formula $C_{12}H_8ClFO_2S$

Name p-Chlorophenyl p-fluorophenyl sulfone

M. W. 270.71

Description and Constants
White crystals

m.p. $109-112^{\circ}$



Literature

Functional Groups Hal-2
S-2

Handling and Shipping

Price 25 g. - \$ 9.75 100 g. - \$28.00 Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,097-4

Empirical Formula $C_8H_{10}O_3$

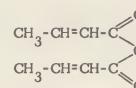
Name Crotonic anhydride

M. W. 154.17

Description and Constants
Amber liquid

n_D^{20} 1.4742

b.p. 248°



Literature

Functional Groups Ca-1

Handling and Shipping

Price 10 g. - \$ 3.00 50 g. - \$10.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. C6720-6

Empirical Formula C_8H_9ClO

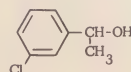
Name 3-Chlorophenyl methyl carbinol
(m-chloro- α -methylbenzyl alcohol)

M. W. 156.61

Description and Constants

Colorless liquid

n_D^{20} 1.5440



Literature

Functional Groups Hal-2
OH-1

Handling and Shipping

(Relisted chemical)

Price 5 g. - \$8.00 25 g. - \$24.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,330-2

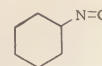
Empirical Formula $C_7H_{11}N$

Name Cyclohexyl isocyanide
(cyclohexyl isonitrile)

M. W. 109.17

Description and Constants

Yellow-orange liquid



Literature

Functional Groups N

Handling and Shipping Very unpleasant odor. Handle with adequate ventilation.

Price 1 g. - \$5.50 5 g. - \$18.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



KARDINDEX SHEETS NO. 28

WINTER 1967

No. 13,588-7

Empirical Formula $C_8H_{10}O_4$

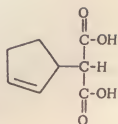
Name (2-Cyclopenten-1-yl)malonic acid

M. W. 170.17

Description and Constants
White powder

m.p. 146-148°

Titration 97.5%



Literature

Functional Groups Ca-1

Handling and Shipping

Price 10 g. - \$ 4.00 50 g. - \$12.00 (Relisted. Formerly C11,380)

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,339-6

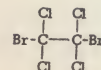
Empirical Formula $C_2Br_2Cl_4$

Name 1,2-Dibromotetrachloroethane

M. W. 325.65

Description and Constants
White crystals

m.p. 220-222° (dec.)



Literature

Functional Groups Hal-1

Handling and Shipping

Price 25 g. - \$ 5.00 100 g. - \$15.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,658-1

Empirical Formula $C_7H_{12}N_2$

Name 1,5-Diazabicyclo[4.3.0]-5-nonene

M. W. 124.19

Description and Constants

Colorless liquid

 n_D^{20} 1.5190

b.p. 95-98°/7.5 mm.

v.p.c. 96%

An excellent reagent for the introduction of double bonds under

mild conditions.

Literature

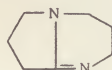
Chem. Ber., 99, 2015 (1966)

Functional Groups Am III-4

Handling and Shipping Packed under nitrogen. Avoid exposure to air and moisture.

Price 25 g. - \$ 8.25 100 g. - \$25.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,609-3

Empirical Formula $C_{13}H_7Cl_2FO$

Name 2,4-Dichloro-4'-fluorobenzophenone

M. W. 269.10

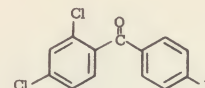
Description and Constants

Colorless liquid

 n_D^{20} 1.6015

b.p. 150°/0.1 mm.

v.p.c. 994%



Literature

Functional Groups Hal-2
K-2

Handling and Shipping

Price 25 g. - \$ 8.75 100 g. - \$25.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. D3168-0

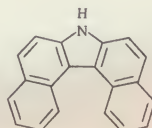
Empirical Formula $C_{20}H_{13}N$ Name 7H-Dibenzo[c,g]carbazole
(3,4,5,6-dibenzocarbazole)

M. W. 267.33

Description and Constants

Tan powder

m.p. 157-158°



Literature

Beil. 20, 526 (193)

Functional Groups Am III-4

Handling and Shipping

Price 100 mg. - \$ 8.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

(Relisted chemical)
Catalog 13 item.

No. 13,053-2

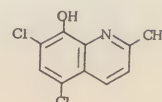
Empirical Formula $C_{10}H_7Cl_2NO$ Name 5,7-Dichloro-8-hydroxyquinoline
(5,7-dichloro-8-quinolindinol)

M. W. 228.08

Description and Constants

Yellow powder

m.p. 107-109°



Literature

Functional Groups Am III-4
Hal-2
P

Handling and Shipping

Price 10 g. - \$ 4.00 50 g. - \$12.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,338-8

Empirical Formula $C_{12}H_{24}Br_2$

Name 1,12-Dibromododecane

M. W. 328.14

Description and Constants

Off-white solid

m.p. 37-39°

v.p.c. 99%



Literature

Functional Groups Hal-1

Handling and Shipping

Price 25 g. - \$3.50 100 g. - \$10.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,553-4

Empirical Formula C_8H_{12}

Name 1,1-Dicyclopropylethylene

M. W. 108.18

Description and Constants

Colorless liquid

 n_D^{20} 1.4633

Literature

Functional Groups Hy-5

Handling and Shipping

Price 1 g. - \$18.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,102-4

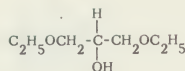
Empirical Formula $C_7H_{16}O_3$

Name 1,3-Diethoxy-2-propanol

M. W. 148.20

Description and Constants
Colorless liquid n_D^{20} 1.4212

b.p. 190-193°



Literature

Functional Groups Et-1
OH-1

Handling and Shipping

Price 10 g. - \$ 3.00

50 g. - \$10.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,505-4

Empirical Formula $C_{14}H_{20}N_2$

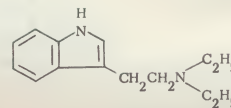
Name N,N-Diethyltryptamine

M. W. 216.33

Description and Constants
White powder

m.p. 87-89°

Titration 98.2%



Literature

Functional Groups Am I
Ind

Handling and Shipping

Price 1 g. - \$22.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,554-2

Empirical Formula $C_{14}H_{18}O_4$

Name Diethyl benzylmalonate

M. W. 250.30

Description and Constants
Colorless liquid n_D^{20} 1.4868

b.p. 162-163°/10 mm.

v.p.c. 98%

Literature

Functional Groups Es

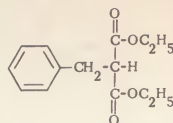
Handling and Shipping

Price 25 g. - \$ 3.50

100 g. - \$11.75

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



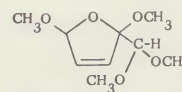
No. 13,566-6

Empirical Formula $C_9H_{16}O_5$ Name 2,5-Dihydro-2,5-dimethoxy-2-(dimethoxymethyl)-furan
(mixture of cis and trans)

M. W. 204.22

Description and Constants
Colorless liquid n_D^{20} 1.4455

v.p.c. 98%



Literature

Acta Chem.Scand.6, 545(1952)

Functional Groups A + K

Handling and Shipping

Price 5 g. - \$ 5.25

25 g. - \$14.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,264-0

Empirical Formula $C_5H_{11}NS_2$

Name Diethyldithiocarbamic acid, lead salt, moist

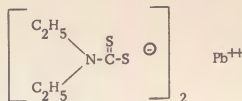
M. W. 503.73 (dry)

Description and Constants

Light yellow powder

m.p. 204-206°

Used in the determination of copper.



Literature

Chem. Abstr. 55, 21971h (1961)

Functional Groups S-7

Handling and Shipping

(Catalog 13 item)

Price 50 g. - \$5.00

250 g. - \$15.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. D12,160-6

Empirical Formula $C_{16}H_{14}N_4O_4$

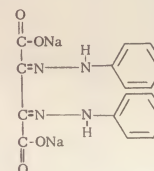
Name Dihydroxytartaric acid osazone, disodium salt

M. W. 370.28

Description and Constants
Yellow powder

m.p. 238° (dec.)

Titration 99.3%



Literature

Functional Groups Ca-1
HZ

Handling and Shipping

Price 10 g. - \$ 6.00

50 g. - \$18.00

(Relisted chemical)
Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,473-2

Empirical Formula $C_{10}H_{14}N_2O$ Name N,N-Diethyl-4-nitrosoaniline
(4-nitroso-N,N-diethylaniline)

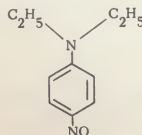
M. W. 178.24

Description and Constants

Green crystals

m.p. 85-86°

Titration 99%



Literature

Functional Groups Am I
Nit

Handling and Shipping

(Catalog 13 item)

Price 50 g. - \$5.00

250 g. - \$15.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,539-9

Empirical Formula $C_{14}H_{22}$

Name 4,6-Diisopropyl-1,3-dimethylbenzene

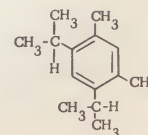
M. W. 190.33

Description and Constants

Colorless liquid

 n_D^{20} 1.4981

v.p.c. 99.4%



Literature

Functional Groups Hy-5

Handling and Shipping

Price 250 g. - \$6.00 1 Kg. - \$15.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



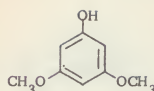
KARDINDEX SHEETS NO. 28

WINTER 1967

No. 13,263-2

Empirical Formula $C_8H_{10}O_3$ Name 3,5-Dimethoxyphenol
(phloroglucinol dimethyl ether)

M. W. 154.17

Description and Constants
White solidm.p. $38-42^{\circ}$ Literature
Beil. 6, 1101Functional Groups Et-3
P

Handling and Shipping

Price 5 g. - \$10.00 10 g. - \$17.50

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,234-9

Empirical Formula C_9H_9N

Name 2,3-Dimethylbenzonitrile

M. W. 131.18

Description and Constants

Light orange liquid

 n_D^{20} 1.5340b.p. $118-120^{\circ}/20$ mm.

Literature

Functional Groups N

Handling and Shipping

Price 100 g. - \$7.00 500 g. - \$21.00

Catalog 13 item.

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

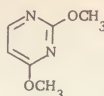


No. 13,521-6

Empirical Formula $C_6H_8N_2O_2$

Name 2,4-Dimethoxypyrimidine

M. W. 140.14

Description and Constants
Yellow liquid n_D^{20} 1.5040

Literature

Functional Groups Py
Et-5

Handling and Shipping

Price 1 g. - \$17.50

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,235-7

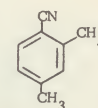
Empirical Formula C_9H_9N

Name 2,4-Dimethylbenzonitrile

M. W. 131.18

Description and Constants

Low melting solid

b.p. $116-118.5^{\circ}/20$ mm.

Literature

Beil. 9, 533 (209)

Functional Groups N

Handling and Shipping

Price 100 g. - \$7.00 500 g. - \$21.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



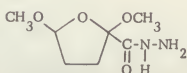
No. 13,259-4

Empirical Formula $C_7H_{14}N_2O_4$ Name 2,5-Dimethoxytetrahydro-2-furoic acid hydrazide
(mixture of cis and trans)

M. W. 190.20

Description and Constants

Off-white solid

m.p. $58-62^{\circ}$ 

A stable acetal from which the corresponding unstable 1,4-dicarbonyl compound may be readily liberated by acid hydrolysis.

Literature

Functional Groups A + K
Hz

Handling and Shipping

Price 1 g. - \$4.00

5 g. - \$12.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,237-3

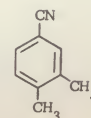
Empirical Formula C_9H_9N

Name 3,4-Dimethylbenzonitrile, tech.

M. W. 131.18

Description and Constants

Brown crystals



Literature

Beil. 9, 536

Functional Groups N

Handling and Shipping

Price 50 g. - \$6.00 250 g. - \$18.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



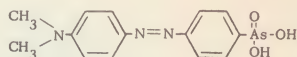
No. 12,448-6

Empirical Formula $C_{14}H_{16}AsN_3O_3$ Name 4-(p-Dimethylaminophenylazo)-benzenearsonic
acid hydrochloride

M. W. 385.68

Description and Constants

Purple crystals

m.p. $205-208^{\circ}(\text{dec.})$ 

· HCl

Used as a reagent for zirconium.

Literature

Functional Groups Am I
Az
O.M. -5

Handling and Shipping

(Formerly D13,921)

Price 10 g. - \$5.00 25 g. - \$10.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,844-3

Empirical Formula C_8H_{16}

Name cis-2,5-Dimethyl-3-hexene

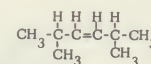
M. W. 112.22

Description and Constants

Colorless liquid

 n_D^{20} 1.3994

v.p.c. 99+%



Literature

Functional Groups Hy-2

Handling and Shipping

Price 5 g. - \$8.00 10 g. - \$14.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. D16,750-9

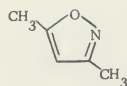
Empirical Formula C_5H_7NO

Name 3,5-Dimethylisoxazole

M. W. 97.12

Description and Constants

Colorless liquid
 n_D^{20} 1.4421
 b.p. 142-144°
 v.p.c. 99%



Literature
 Beil. 27, 17, II 9

Functional Groups Am III-4

Handling and Shipping

(Relisted chemical)

Price 25 g. - \$6.00 100 g. - \$18.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



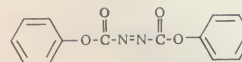
No. 13,341-8

Empirical Formula $C_{14}H_{10}N_2O_4$

Name Diphenyl azodicarboxylate

M. W. 270.25

Description and Constants
 Orange crystals
 m.p. 122-123°



Literature

Functional Groups Az Es

Handling and Shipping

Price 5 g. - \$7.00 25 g. - \$20.00 Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,589-5

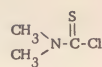
Empirical Formula C_3H_6ClNS

Name Dimethylthiocarbamoyl chloride

M. W. 123.60

Description and Constants

White solid
 m.p. 42-44°



Used in the conversion of phenols to thiophenols.

Literature

Functional Groups S-7

Handling and Shipping

(Catalog 13 item.)

Price 25 g. - \$5.00 100 g. - \$15.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,472-4

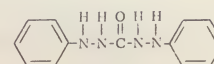
Empirical Formula $C_{13}H_{14}N_4O$

Name sym.-Diphenylcarbazine
 (1,5-diphenylcarbohydrazide), tech.

M. W. 242.28

Description and Constants

White powder
 m.p. 166-168°



Literature

Beil. 15, 292 (72)

Functional Groups Hz

Handling and Shipping

Price 25 g. - \$4.50 100 g. - \$12.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,100-8

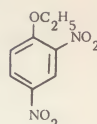
Empirical Formula $C_8H_8N_2O_5$

Name 2,4-Dinitrophenetole

M. W. 212.16

Description and Constants

Yellow powder
 m.p. 83-85.5°



Literature
 Beil. 6, 254 (126)

Functional Groups Et-3 Nit

Handling and Shipping

Price 25 g. - \$3.75 100 g. - \$12.50

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,315-9

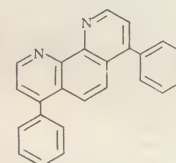
Empirical Formula $C_{24}H_{16}N_2$

Name 4,7-Diphenyl-1,10-phenanthroline

M. W. 332.41

Description and Constants

Off-white flakes
 m.p. 218-220°
 Titration 98.8%



Used as a reagent for iron.

Literature

Anal. Chem. 29, 1337 (1954)

Functional Groups Am III-4

Handling and Shipping

Price 500 mg. - \$9.75 1 g. - \$17.25 Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,117-7

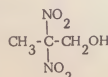
Empirical Formula $C_3H_6N_2O_5$

Name 2,2-Dinitropropanol (30% solution in ethylene chloride)

M. W. 150.09 (dry)

Description and Constants

Colorless liquid
 n_D^{20} 1.4495



Literature
 J. Org. Chem. 28, 2491 (1963)
 Chem. Rev. 64, 19 (1964)

Functional Groups OH-1 Nit

Handling and Shipping

Red label. Store in a cool, well ventilated area.
 Price 250 g. - \$6.00 1 Kg. - \$18.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,478-3

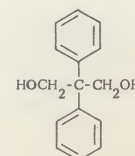
Empirical Formula $C_{15}H_{16}O_2$

Name 2,2-Diphenyl-1,3-propanediol

M. W. 228.29

Description and Constants

Off-white solid
 m.p. 102-104°



Literature

Functional Groups OH-1

Handling and Shipping

Price 25 g. - \$9.00 100 g. - \$28.00 Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,109-1

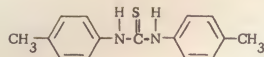
Empirical Formula $C_{15}H_{16}N_2S$

Name N,N'-Di-p-tolylthiourea

M. W. 256.37

Description and Constants
White powder

m.p. 180-181°



Literature

Functional Groups Ur

Handling and Shipping

Price 25 g. - \$ 3.00

100 g. - \$10.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,511-9

Empirical Formula $C_7H_{15}O_5P$

Name Ethyl diethoxyphosphinylformate

M. W. 210.17

Description and Constants
Colorless liquid n_D^{20} 1.4230

v.p.c. 98%

Used in the conversion of ketones to β -keto acids.

Literature

J. Am. Chem. Soc. 77, 3813 (1955)

Tetrahedron Letters 20, 2201 (1966)

Handling and Shipping

Functional Groups Phos

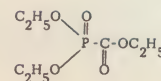
Catalog 13 item.

Price 25 g. - \$ 5.00

100 g. - \$15.00

500 g. - \$60.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,491-0

Empirical Formula $C_{10}H_{15}NO$

Name 1-Ephedrine

[1- α -(1-methylaminoethyl)-benzyl alcohol]

M. W. 165.24

Description and Constants
White crystals

m.p. 37-39°

 $[\alpha]_D^{23}$ -41° (C=5, H_2O-HCl)

Used as a resolving agent.

Literature

Functional Groups Am I
OH-1

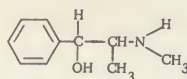
Handling and Shipping Hygroscopic. Decomposes on exposure to light.

Price 25 g. - \$ 7.00

100 g. - \$19.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,459-7

Empirical Formula $C_{13}H_{15}NO_2$

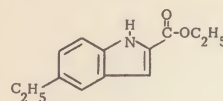
Name Ethyl 5-ethyl-2-indolecarboxylate

M. W. 217.27

Description and Constants

Tan crystals

m.p. 99-102°



Literature

Functional Groups Ind
Es

Handling and Shipping

Price 1 g. - \$4.00 5 g. - \$12.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,537-2

Empirical Formula $C_{12}H_{18}CuO_6$

Name Ethyl acetoacetate, copper derivative

M. W. 321.81

Description and Constants

Green crystals

m.p. 182-185°

Used as a reagent for cyanide.

Literature

Analyst 91, No. 1081, 282 (1966)

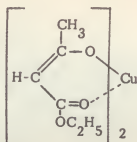
Functional Groups Es
O.M. -5

Handling and Shipping

Price 25 g. - \$5.90

100 g. - \$15.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 10,704-2

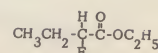
Empirical Formula $C_6H_{11}FO_2$

Name Ethyl 2-fluorobutyrate

M. W. 134.15

Description and Constants

Colorless liquid

 n_D^{20} 1.3886

Literature

Functional Groups Es
Hal-1

Handling and Shipping

Price 5 g. - \$9.00 25 g. - \$30.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,700-5

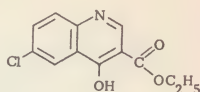
Empirical Formula $C_{12}H_{10}ClNO_3$

Name Ethyl 6-chloro-4-hydroxy-3-quinolinecarboxylate, tech.

M. W. 251.67

Description and Constants
Tan solid

m.p. 270° (dec.)



Literature

Functional Groups Am III-4
Es
Hal-2
OH-3

Handling and Shipping

Price 10 g. - \$ 6.00

25 g. - \$12.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,460-0

Empirical Formula $C_{13}H_{18}N_2$

Name 5-Ethylgramine

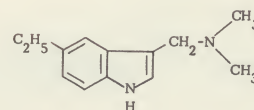
M. W. 202.30

Description and Constants

Tan powder

m.p. 110-113°

Titration 97.7%



Literature

Functional Groups Am I
Ind

Handling and Shipping

Price 1 g. - \$16.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,469-4

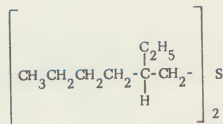
Empirical Formula $C_{16}H_{34}S$

Name 2-Ethylhexyl sulfide

M. W. 258.51

Description and Constants
Colorless liquid n_D^{20} 1.4634

v.p.c. 99%



Literature

Functional Groups S-1

Handling and Shipping

Price 25 g. - \$9.75 100 g. - \$28.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,086-9

Empirical Formula $C_7H_{10}O$

Name 1-Ethynylcyclopentanol

M. W. 110.16

Description and Constants
Colorless liquid n_D^{20} 1.4751

v.p.c. 98-3%



Literature

Functional Groups OH-1

Handling and Shipping

Price 5 g. - \$5.00 25 g. - \$15.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,462-7

Empirical Formula $C_{12}H_{13}NO_2$

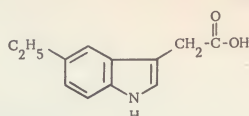
Name 5-Ethyl-3-indoleacetic acid

M. W. 203.24

Description and Constants
Off-white crystals

m.p. 130-132°

Titration 99%



Literature

Functional Groups Ca-1
Ind.

Handling and Shipping

Price 1 g. - \$27.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,092-8

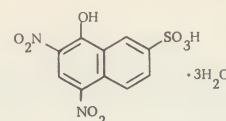
Empirical Formula $C_{10}H_6N_2O_5S$ Name Flavianic acid
(5,7-dinitro-8-hydroxy-2-naphthalenesulfonic acid) trihydrate

M. W. 368.28

Description and Constants

Yellow powder

m.p. 146-149° (dec.)



Literature

Functional Groups P
Nit
S-3

Handling and Shipping

Price 25 g. - \$3.50 100 g. - \$11.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,463-5

Empirical Formula $C_{11}H_{11}NO_2$

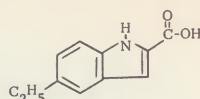
Name 5-Ethyl-2-indolecarboxylic acid

M. W. 189.22

Description and Constants

Tan crystals

m.p. 183-184°



Literature

Functional Groups Ind
Ca-4

Handling and Shipping

Price 1 g. - \$5.00 5 g. - \$15.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,647-6

Empirical Formula $C_{14}H_9FO_3$

Name 2-(p-Fluorobenzoyl)-benzoic acid

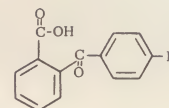
M. W. 244.22

Description and Constants

Light yellow crystals

m.p. 135-136°

Titration 98.5%



Literature

Functional Groups Ca-2
Hal-2
K-2

Handling and Shipping

Price 10 g. - \$6.50 50 g. - \$16.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,274-8

Empirical Formula $C_6H_9NO_3$

Name N-Ethylmaleamic acid

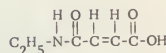
M. W. 143.14

Description and Constants

Off-white crystals

m.p. 123-125°

Titration 99.8%



Literature

Functional Groups Ca-1
AA

Handling and Shipping

Price 25 g. - \$3.00 100 g. - \$8.25

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,479-1

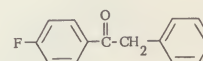
Empirical Formula $C_{14}H_{11}FO$ Name 4'-Fluorodeoxybenzoin
(4'-fluoro-α-phenylacetophenone)

M. W. 214.24

Description and Constants

Off-white solid

m.p. 77-80°



Literature

Functional Groups Hal-2
K-3

Handling and Shipping

Price 25 g. - \$9.75 100 g. - \$30.00 Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



KARDINDEX SHEETS NO. 28

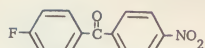
WINTER 1967

No. 13,622-0
Name 4-Fluoro-4'-nitrobenzophenone

M. W. 245.21

Description and Constants

Light yellow crystals
m.p. 83-86°



Literature

Functional Groups Hal-2
K-2
Nit

Handling and Shipping

Price 25 g. - \$8.50 100 g. - \$22.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER

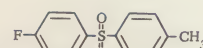


No. 13,623-9
Name p-Fluorophenyl p-tolyl sulfone

M. W. 250.29

Description and Constants

Off-white crystals
m.p. 92-96°



Literature

Functional Groups Hal-2
S-2

Handling and Shipping

Price 25 g. - \$9.25 100 g. - \$25.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER

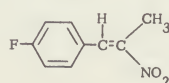


No. 11,890-7
Name p-Fluoro-β-nitropropenylbenzene

M. W. 181.17

Description and Constants
Yellow flakes

m.p. 65-66°



Literature

Functional Groups Hal-2
Nit

Handling and Shipping

Price 1 g. - \$5.00 5 g. - \$19.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

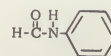


No. 13,332-9
Name Formanilide

M. W. 121.14

Description and Constants

Off-white powder
m.p. 46-48°



Literature

Functional Groups AA

Handling and Shipping

Price 100 g. - \$6.75 500 g. - \$20.50

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER

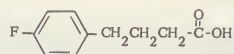


No. 13,529-1
Name 4-(p-Fluorophenyl)-butyric acid

M. W. 182.20

Description and Constants

White crystals
m.p. 42-45°
Titration 97%



Literature

Functional Groups Ca-1
Hal-2

Handling and Shipping

Price 10 g. - \$9.00 50 g. - \$30.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

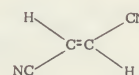


No. 13,101-6
Name Fumaronitrile

M. W. 78.07

Description and Constants
White crystals

m.p. 93-96°
v.p.c. 99%



Literature

Beil. 2, (302)

Functional Groups N

Handling and Shipping

Price 5 g. - \$6.00 25 g. - \$24.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER

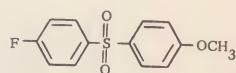


No. 13,616-6
Name p-Fluorophenyl p-methoxyphenyl sulfone

M. W. 266.29

Description and Constants

Light yellow crystals
m.p. 96-98.5°



Literature

Functional Groups Et-3
Hal-2
S-2

Handling and Shipping

Price 25 g. - \$9.50 100 g. - \$28.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

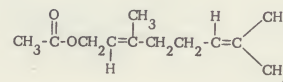


No. G80-3
Name Geranyl acetate

M. W. 196.29

Description and Constants

Colorless liquid
n_D²⁰ 1.4622
b.p. 242-245° (dec.)



Literature

Beil. 2, 140 (65)

Functional Groups Es

Handling and Shipping

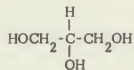
(Relisted chemical)

Price 100 g. - \$4.50 500 g. - \$16.00

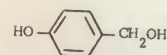
Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,487-2 Empirical Formula $C_3H_8O_3$
 Name Glycerol, U.S.P.
 M. W. 92.10
 Description and Constants
 Colorless liquid
 n_D^{20} 1.4746
 b.p. $182^\circ/2$ mm.
 m.p. 17.8°
 Literature Functional Groups CH
 Handling and Shipping
 Price 1 Kg. - \$3.00 4 Kg. - \$8.00 23 Kg. - \$43.00
 Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



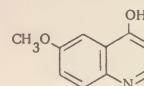
No. H2080-6 Empirical Formula $C_7H_8O_2$
 Name 4-Hydroxybenzyl alcohol
 M. W. 124.14
 Description and Constants
 Tan powder
 m.p. $116-119^\circ$
 Literature Functional Groups OH-1
 Bell. 6, 897 P
 Handling and Shipping (Relisted chemical)
 Price 25 g. - \$9.00 100 g. - \$25.00
 Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



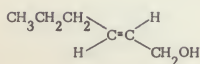
No. 12,718-3 Empirical Formula $C_3H_9N_3$
 Name Hexahydro-s-triazine
 (50% aqueous solution)
 M. W. 87.12 (dry)
 Description and Constants
 Colorless liquid
 n_D^{20} 1.4160
 Literature Functional Groups Am III-4
 Handling and Shipping
 Price 10 g. - \$4.00 50 g. - \$12.00
 Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



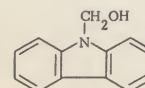
No. 13,668-9 Empirical Formula $C_{10}H_9NO_2$
 Name 4-Hydroxy-6-methoxyquinoline
 M. W. 175.19
 Description and Constants
 Tan powder
 m.p. $241-243^\circ$
 Titration 99%
 Literature Functional Groups Am III-4
 J. Am. Chem. Soc. 68, 1204 (1946) Et-3
 OH-3
 Handling and Shipping (Formerly H3750)
 Price 5 g. - \$15.00
 Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



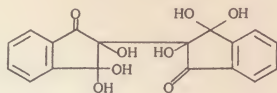
No. 13,266-7 Empirical Formula $C_6H_{12}O$
 Name trans-2-Hexen-1-ol
 M. W. 100.16
 Description and Constants
 Colorless liquid
 n_D^{20} 1.4343
 v.p.c. 96%
 Literature Functional Groups OH-1
 Handling and Shipping
 Price 5 g. - \$4.00 25 g. - \$12.00
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



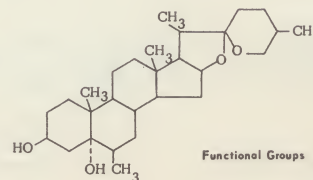
No. 13,540-2 Empirical Formula $C_{13}H_{11}NO$
 Name N-Hydroxymethylcarbazole
 M. W. 197.24
 Description and Constants
 White powder
 m.p. $132-135^\circ$
 Literature Functional Groups Am III-4
 Bell. 20, (165) OH-1
 Handling and Shipping
 Price 100 g. - \$6.00 500 g. - \$18.00
 Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



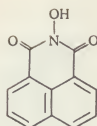
No. 13,563-1 Empirical Formula $C_{18}H_{14}O_8$
 Name Hydrindantin dihydrate
 M. W. 358.31
 Description and Constants
 Off-white powder
 m.p. $258-259^\circ$
 Literature Functional Groups OH-1
 K-4
 Handling and Shipping
 Price 10 g. - \$5.00 50 g. - \$15.00 Catalog 13 item.
 Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. H4480-2 Empirical Formula $C_{28}H_{46}O_4$
 Name 5 α -Hydroxy-6 β -methyltigogenin
 (6 β -methylspirostane-3 β ,5 α -diol)
 M. W. 446.68
 Description and Constants
 White powder
 m.p. $215-220^\circ$
 Literature Functional Groups A + K
 OH-1
 Ster
 Handling and Shipping
 Price 10 g. - \$7.00 25 g. - \$14.00 Catalog 13 item.
 (Relisted chemical)
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12, 183-5 Empirical Formula $C_{12}H_7NO_3$
 Name N-Hydroxynaphthalimide
 (naphthalhydroxamic acid)
 M. W. 213.19
 Description and Constants
 Yellow powder
 m.p. 282-283°
 Used as a reagent for calcium.



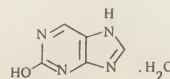
Literature Functional Groups AA
 OH-3

Handling and Shipping

Price 5 g. - \$ 3.50 25 g. - \$13.50 Catalog 13 item.
 Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13, 520-8 Empirical Formula $C_5H_4N_4O$
 Name 2-Hydroxypurine
 (2-purinol) monohydrate
 M. W. 154.13
 Description and Constants
 White powder
 m.p. > 300°
 Titration 97.5%



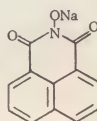
Literature Functional Groups Py

Handling and Shipping

Price 100 mg. - \$ 8.00 1 g. - \$40.00 Catalog 13 item.
 Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12, 184-3 Empirical Formula $C_{12}H_7NO_3$
 Name N-Hydroxynaphthalimide
 (naphthalhydroxamic acid), sodium salt, moist
 M. W. 235.18 (dry)
 Description and Constants
 Orange powder
 m.p. > 300°
 Used as a reagent for calcium.



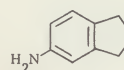
Literature Functional Groups AA
 OH-3

Handling and Shipping

Price 5 g. - \$3.50 25 g. - \$13.50
 Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13, 087-7 Empirical Formula $C_9H_{11}N$
 Name 5-Indanamine
 M. W. 133.19
 Description and Constants
 Tan crystals
 m.p. 32.5-34.5°
 Titration 100%



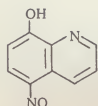
Literature Functional Groups Am II

Handling and Shipping

Price 1 g. - \$ 6.00 5 g. - \$18.00 Catalog 13 item.
 Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. H4920-0 Empirical Formula $C_9H_6N_2O_2$
 Name 8-Hydroxy-5-nitrosoquinoline
 (5-nitroso-8-quinolinol)
 M. W. 174.16
 Description and Constants
 Brown powder
 m.p. 253° (dec.)



Literature Functional Groups Am III-4
 P
 Nit

Handling and Shipping

Price 10 g. - \$ 6.00 50 g. - \$18.00 Catalog 13 item.
 (Relisted chemical)
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13, 619-0 Empirical Formula $C_6H_4INO_2$
 Name o-Iodonitrobenzene
 M. W. 249.01
 Description and Constants
 Yellow crystals
 m.p. 49-50°



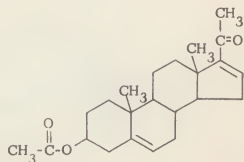
Literature Functional Groups Hal-2
 Nit

Handling and Shipping

Price 25 g. - \$4.00 100 g. - \$13.25
 Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12, 194-0 Empirical Formula $C_{23}H_{32}O_3$
 Name 3β-Hydroxy-5, 16-pregnadien-20-one acetate
 (16-dehydropregnenolone acetate)
 M. W. 356.51
 Description and Constants
 White crystals
 m.p. 166-169°



Literature Functional Groups Es
 K-6
 Ster

Handling and Shipping

Price 10 g. - \$ 7.00 (Relisted. Formerly D400)
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13, 073-7 Empirical Formula C_7H_7I
 Name m-Iodotoluene
 M. W. 218.04
 Description and Constants
 Colorless liquid
 n_D^{20} 1.6032
 b.p. 80-82°/10 mm.



Literature Functional Groups Hal-2

Handling and Shipping

Price 25 g. - \$ 3.25 100 g. - \$10.50 Catalog 13 item.
 Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER

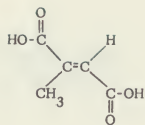


No. 13,104-0
Name Mesaconic acid

Empirical Formula $C_5H_6O_4$

M. W. 130.10

Description and Constants
White powder
m.p. 200-202°
Titration 97%



Literature Functional Groups Ca-1

Handling and Shipping

Price 10 g. - \$ 7.00 50 g. - \$21.00 Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



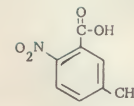
No. 11,340-9

Empirical Formula $C_8H_7NO_4$

Name 3-Methyl-6-nitrobenzoic acid

M. W. 181.15

Description and Constants
Light yellow powder
m.p. 134-136°



Literature Functional Groups Ca-2
Beil. 9, 482 Nit

Handling and Shipping

Price 100 g. - \$8.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,303-5

Empirical Formula C_4H_6O

Name Methacrolein
(methacrylaldehyde)

M. W. 70.09

Description and Constants

Colorless liquid

n_D^{20} 1.4160

b.p. 53°



Literature Functional Groups A-1

Handling and Shipping Red label.

Price 250 g. - \$5.00 1 Kg. - \$13.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,105-9

Empirical Formula $C_7H_{12}N_2O_2$

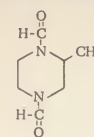
Name 2-Methylpiperazine-N,N'-dicarboxaldehyde

M. W. 156.19

Description and Constants

White solid

Used as a stationary phase for
gas chromatography.



Literature Functional Groups AA

Handling and Shipping

Price 5 g. - \$6.00 25 g. - \$18.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,481-3

Empirical Formula $C_6H_6O_7$

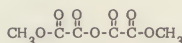
Name Methoxalic acid anhydride

M. W. 190.11

Description and Constants

White crystals

m.p. 48-52°



Literature Functional Groups Ca-1
Es

Handling and Shipping Very hygroscopic.

Price 5 g. - \$6.00 25 g. - \$18.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,308-6

Empirical Formula $C_4H_{10}O$

Name 2-Methyl-1-propanol
(isobutyl alcohol)

M. W. 74.12

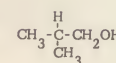
Description and Constants

Colorless liquid

n_D^{20} 1.3955

b.p. 108°

v.p.c. 99+%



Literature Functional Groups OH-1

Handling and Shipping

Price 3 Kg. - \$3.00 15 Kg. - \$12.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,240-3

Empirical Formula $C_8H_{12}O$

Name 1-Methyl-3-cyclohexene-1-carboxaldehyde

M. W. 124.18

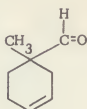
Description and Constants

Colorless liquid

n_D^{20} 1.4618

b.p. 74-79°/33-38 mm.

v.p.c. 98%



Literature Functional Groups A-3

Handling and Shipping

Price 1 g. - \$3.00 5 g. - \$10.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,917-8

Empirical Formula $C_{18}H_{16}IN$

Name 1-Methyl-2-styrylquinolinium iodide

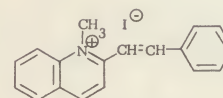
M. W. 373.24

Description and Constants

Brown crystals

m.p. 239-240° (dec.)

Titration 98%



Literature Functional Groups Am III-4

Handling and Shipping

Price 1 g. - \$3.00 5 g. - \$10.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

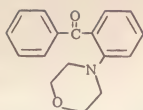


No. 13,648-4
Name 2-Morpholinobenzophenone

M. W. 267.33

Description and Constants

Yellow powder
m.p. 114-116°
Titration 99.3%



Literature

Functional Groups Am III-4
Et-4
K-2

Handling and Shipping

Price 5 g. - \$5.00 25 g. - \$15.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,617-4
Name p-Morpholinopropiophenone

M. W. 219.29

Description and Constants

Off-white crystals
m.p. 73-75°



Literature

Functional Groups Am III-4
Et-4
K-3

Handling and Shipping

Price 5 g. - \$8.50 25 g. - \$25.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

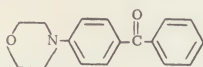


No. 13,620-4
Name 4-Morpholinobenzophenone

M. W. 267.33

Description and Constants

Yellow crystals
m.p. 138-141°
Titration 100%



Literature

Functional Groups Am III-4
Et-4
K-2

Handling and Shipping

Price 5 g. - \$5.75 25 g. - \$18.50

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER

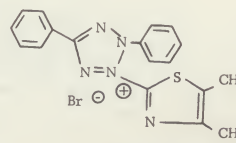


No. 13,503-8
Name MTT
[3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H-tetrazolium bromide]

M. W. 414.34

Description and Constants

Yellow powder
m.p. 189-190° (dec.)



Literature

Functional Groups Am III-4
S-1

Handling and Shipping

Price 500 mg. - \$7.75 1 g. - \$13.00

Catalog 13 item.

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

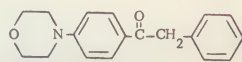


No. 13,633-6
Name 4'-Morpholinodeoxybenzoin
(p-morpholino- α -phenylacetophenone)

M. W. 281.36

Description and Constants

Light yellow crystals
m.p. 131-135°
Titration 96.5%



Literature

Functional Groups Am III-4
Et-4
K-3

Handling and Shipping

Price 5 g. - \$6.50 25 g. - \$19.75

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



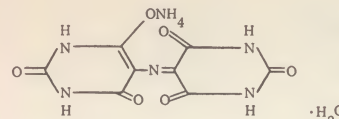
No. M9020-8
Name Murexide

M. W. 302.20

Description and Constants

Purple-red powder
m.p. > 300°

Used as an indicator in
chelometric titrations.



Literature

Functional Groups Im
Ur

Handling and Shipping

(Relisted chemical)

Price 5 g. - \$6.00 25 g. - \$18.00

Catalog 13 item.

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

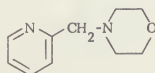


No. 13,573-9
Name 2-(Morpholinomethyl)-pyridine

M. W. 178.24

Description and Constants

Yellow liquid
 n_D^{20} 1.5313



Literature

Functional Groups Am III-1
Am III-4
Et-4

Handling and Shipping

Price 5 g. - \$5.00 25 g. - \$12.00

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER

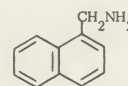


No. 12,703-5
Name 1-Naphthalenemethylamine, tech.

M. W. 157.22

Description and Constants

Colorless liquid
 n_D^{20} 1.6370
b.p. 138-141°/7 mm.



Literature

Bell, 12, 1316

Functional Groups Am I

Handling and Shipping

Price 5 g. - \$4.00 25 g. - \$12.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,074-5

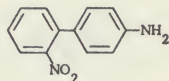
Empirical Formula $C_{12}H_{10}N_2O_2$

Name 2'-Nitro-4-biphenylamine

M. W. 214.23

Description and Constants
Red-brown crystals

m.p. 92-95°

Literature
Beil. 12, 1321Functional Groups Am II
Nit

Handling and Shipping Carcinogen. Handle with great care.

Price 1 g. - \$ 4.00

5 g. - \$12.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,552-5

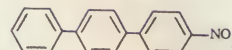
Empirical Formula $C_{18}H_{13}NO_2$

Name 4-Nitro-p-terphenyl

M. W. 275.31

Description and Constants
Tan crystals

m.p. 209-213°



Literature

Functional Groups Nit

Handling and Shipping

Price 5 g. - \$ 8.00

25 g. - \$32.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,075-3

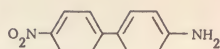
Empirical Formula $C_{12}H_{10}N_2O_2$

Name 4'-Nitro-4-biphenylamine

M. W. 214.23

Description and Constants
Red-brown powder

m.p. 198-201°

Literature
Beil. 12, 1321Functional Groups Am II
Nit

Handling and Shipping Carcinogen. Handle with great care.

Price 1 g. - \$ 4.00

5 g. - \$12.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,051-6

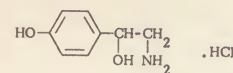
Empirical Formula $C_8H_{11}NO_2$ Name dl-Octopamine
[dl-α-(aminomethyl)-p-hydroxybenzyl alcohol] hydrochloride

M. W. 189.64

Description and Constants
White crystals

m.p. 169-170° (dec.)

Titration 98%



Literature

Functional Groups Am I
OH-1
P

Handling and Shipping

Price 10 g. - \$ 7.00

50 g. - \$21.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



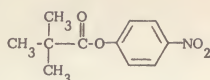
No. 13,504-6

Empirical Formula $C_{11}H_{13}NO_4$ Name p-Nitrophenyl trimethylacetate
(p-nitrophenyl pivalate)

M. W. 223.23

Description and Constants
Tan powder

m.p. 92-95°



Literature

Functional Groups Es
Nit

Handling and Shipping

Price 25 g. - \$ 8.00

100 g. - \$19.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



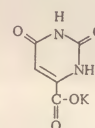
No. 13,054-0

Empirical Formula $C_5H_4N_2O_4$ Name Oxotic acid
(2,6-dioxo-1,2,3,6-tetrahydro-4-pyrimidinecarboxylic acid), potassium salt

M. W. 194.19

Description and Constants
White powder

m.p. > 300°



Literature

Functional Groups Py

Handling and Shipping

Price 25 g. - \$ 3.00

100 g. - \$10.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,076-1

Empirical Formula $C_9H_9NO_3$

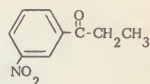
Name m-Nitropropionophenone

M. W. 179.18

Description and Constants

Light yellow crystals

m.p. 97-100°

Literature
Beil. 7, 302Functional Groups K-3
Nit

Handling and Shipping

Price 10 g. - \$5.00

50 g. - \$15.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,655-7

Empirical Formula $C_7H_{10}N_2O$

Name 2-Oxo-1-pyrrolidinepropionitrile

M. W. 138.17

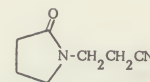
Description and Constants

Colorless liquid

 n_D^{20} 1.4873

b.p. 138-140°/0.3 mm.

v.p.c. 99%



Literature

Functional Groups AA
N

Handling and Shipping

Price 25 g. - \$3.00

100 g. - \$8.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



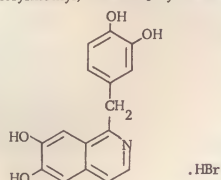
No. 11,658-0 Empirical Formula $C_{16}H_{13}NO_4$

Name Papaveroline
[4-(6,7-dihydroxy-1-isoquinolylmethyl)-catechol] hydrobromide

M. W. 364.20

Description and Constants
Off-white powder

m.p. 255° (dec.)



Literature

Functional Groups Am III-4
P

Handling and Shipping

Price 1 g. - \$19.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,108-3

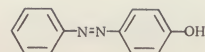
Empirical Formula $C_{12}H_{10}N_2O$

Name p-Phenylazophenol

M. W. 198.23

Description and Constants
Brown crystals

m.p. 155-157°



Literature

Beil. 16,96(233)

Functional Groups Az
P

Handling and Shipping

Price 25 g. - \$ 4.00

100 g. - \$12.00

Catalog 13 item.

Set No. 107 10/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,899-6

Empirical Formula $C_{10}H_{18}O_6$

Name Peroxysebacic acid urea inclusion compound

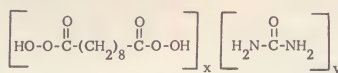
M. W. 234.25 (free acid)

Description and Constants

White powder

m.p. 108-111° (dec.)

A novel, stable source for
atomic oxygen.



(x: y ≈ 1: 11.7)

Literature

Functional Groups Ca-1

Handling and Shipping

Price 10 g. - \$3.00 50 g. - \$10.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. P3680-0

Empirical Formula $C_{19}H_{12}O_5$

Name 9-Phenyl-2,3,7-trihydroxy-6-fluorone

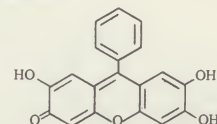
M. W. 320.30

Description and Constants

Brown powder

m.p. > 300°

Used as a reagent for germanium.



Literature

Beil. 18, 199 (404)

Functional Groups Et-4
P
K-4

Handling and Shipping

(Catalog 13 item)
(Relisted chemical)

Price 10 g. - \$7.00 25 g. - \$14.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,590-9

Empirical Formula $C_{12}H_{17}NO$

Name D-Phendimetrazine
(D-3,4-dimethyl-2-phenylmorpholine) bitartrate

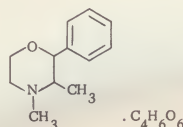
M. W. 341.36

Description and Constants

White powder

m.p. 190-192°

Titration 96.5%



Literature

Functional Groups Am III-4
Et-4

Handling and Shipping

Price 5 g. - \$ 5.00 25 g. - \$15.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,532-1

Empirical Formula $C_9H_{14}BrN$

Name Phenyltrimethylammonium bromide

M. W. 216.13

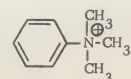
Description and Constants

Grey crystals

m.p. 208° (dec.)

Titration 98.8%

Used in the selective bromination of ketones.



Br⁻

Literature

Bull. Soc. chim. France (2), 511 (1965)
J. Het. Chem. 3, 11 (1966)

Functional Groups Am I

Handling and Shipping

Catalog 13 item.

Price 100 g. - \$6.00 500 g. - \$25.00 1 Kg. - \$40.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,584-4

Empirical Formula C_8H_9NO

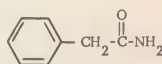
Name 2-Phenylacetamide

M. W. 135.17

Description and Constants

White powder

m.p. 157-158.5°



Literature

Functional Groups AA

Handling and Shipping

Price 250 g. - \$7.00 1 Kg. - \$18.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,468-6

Empirical Formula $C_{20}H_{40}O_2$

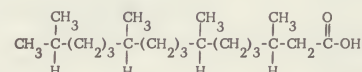
Name Phytanic acid
(3,7,11,15-tetramethylhexadecanoic acid)

M. W. 312.54

Description and Constants

Yellow liquid

n_D^{20} 1.4550



Literature

Functional Groups Ca-1

Handling and Shipping

Price 1 g. - \$5.00 5 g. - \$15.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,476-7

Empirical Formula $C_6CrK_3N_6S_6$

Name Potassium hexathiocyanatochromate (III)

M. W. 517.79

Description and Constants
Purple powder

m.p. 247° (dec.)

 $K_3Cr(SCN)_6$

Literature

Functional Groups Cy

Handling and Shipping

Price 100 g. - \$ 6.00

Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 10,430-2

Empirical Formula $C_{18}H_{16}N_2O$

Name Sudan II

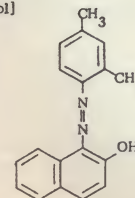
[1-(2,4-dimethylphenylazo)-2-naphthol]

M. W. 276.34

Description and Constants
Orange powder

m.p. 159-161.5°

Used as a biological stain.

Functional Groups Az
P

Literature

C. I. No. 12140

Handling and Shipping

Price 100 g. - \$ 8.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. P6400-6

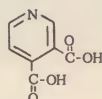
Empirical Formula $C_7H_5NO_4$ Name 3,4-Pyridinedicarboxylic acid
(cinchomeronic acid)

M. W. 167.12

Description and Constants

Orange powder

m.p. 262° (dec.)



Literature

Beil., 22, 155 (534)

Functional Groups Am III-1
Ca-4

Handling and Shipping

(Relisted chemical)

Price 5 g. - \$5.00 25 g. - \$12.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,587-9

Empirical Formula $C_3H_9NO_3S$

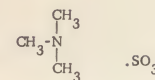
Name Sulfur trioxide trimethylamine complex

M. W. 139.17

Description and Constants
White powder

m.p. 232-238° (dec.)

Titration 99%



Literature

Functional Groups Am I
S-7Handling and Shipping Toxic. Avoid ingestion or inhalation of dust.
Hydrolyzes slowly in the presence of moisture.

Price 100 g. - \$ 5.00 500 g. - \$15.00

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



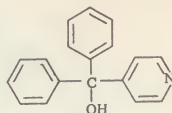
No. 12,198-3

Empirical Formula $C_{18}H_{15}NO$ Name α -4-Pyridylbenzhydrol

M. W. 261.33

Description and Constants
White powder

m.p. 236-237.5°



Literature

Functional Groups Am III-1
OH-1

Handling and Shipping

Price 25 g. - \$ 6.00 100 g. - \$18.00 (Relisted. Formerly D21, 260)

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,262-4

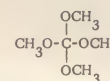
Empirical Formula $C_5H_{12}O_4$

Name Tetramethyl orthocarbonate

M. W. 136.15

Description and Constants
Colorless liquid n_D^{20} 1.3845

v.p.c. 99%



Literature

Functional Groups A + K

Handling and Shipping

Price 5 g. - \$ 8.50 10 g. - \$14.00 Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,492-9

Empirical Formula $C_{21}H_{22}N_2O_2$

Name 1-Strychnine

M. W. 334.42

Description and Constants
White powder

m.p. 284-286°

Titration 98.5%

Used as a resolving agent.

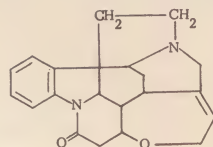
Literature

Functional Groups Am III-4
AA
Et-4

Handling and Shipping Poison!!

Price 25 g. - \$ 9.00 100 g. - \$21.00

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,316-7

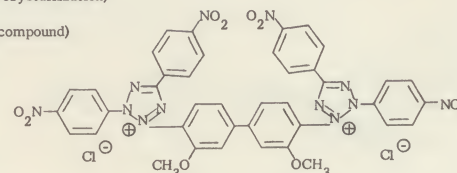
Empirical Formula $C_{40}H_{28}Cl_2N_{12}O_{10}$ Name Tetranitro blue tetrazolium chloride
(contains ethanol of crystallization)

M. W. 907.65 (ethanol free compound)

Description and Constants
Yellow powder

m.p. 165° (dec.)

Titration 98%



Literature

Functional Groups Am III-4
Et-3
Nit

Handling and Shipping

Price 100 mg. - \$ 5.00 1 g. - \$25.00 Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



KARDINDEX SHEETS NO. 28

WINTER 1967

No. 13,465-1

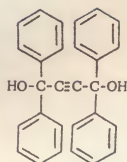
Empirical Formula $C_{26}H_{22}O_2$

Name 1,1,4,4-Tetraphenyl-2-butyne-1,4-diol

M. W. 390.49

Description and Constants
White powder

m.p. 191-193°



Functional Groups OH-1

Literature
Beil. 6, (528)

Handling and Shipping

Price 1 g. - \$ 6.00

5 g. - \$18.00

Catalog 13 item.

Set No. 106 10/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,233-0

Empirical Formula C_8H_7N

Name p-Tolunitrile

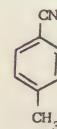
M. W. 177.15

Description and Constants

Low melting solid

b.p. 103-106°/20 mm.

v.p.c. 99+%



Literature

Functional Groups N

Handling and Shipping

Price 100 g. - \$5.00 500 g. - \$15.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,632-8

Empirical Formula $C_3H_3NO_2S$

Name 2,4-Thiazolidinedione

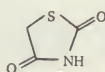
M. W. 117.13

Description and Constants

Yellow crystals

m.p. 124-126°

Titration 99.5%



Literature

Functional Groups Am III-4
S-1

Handling and Shipping

(Relisted. Formerly T2760)

Price 25 g. - \$4.00

100 g. - \$12.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,480-5

Empirical Formula $C_{30}H_{60}O_2$

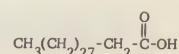
Name Triacontanoic acid

M. W. 452.81

Description and Constants

White crystals

m.p. 93.5-95.5°



Literature

Functional Groups Ca-1

Handling and Shipping

Price 100 mg. - \$6.00 1 g. - \$40.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,317-5

Empirical Formula C_9H_9NOS

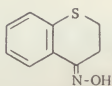
Name Thiochroman-4-one oxime

M. W. 179.24

Description and Constants

Off-white crystals

m.p. 98-100°



Literature

Functional Groups S-1

Handling and Shipping

Price 5 g. - \$6.00

25 g. - \$18.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,312-4

Empirical Formula C_2HCl_3

Name Trichloroethylene

M. W. 131.39

Description and Constants

Colorless liquid

 n_D^{20} 1.4770

b.p. 87°

v.p.c. 99+%



Literature

Functional Groups Hal-1

Handling and Shipping

Price 5 Kg. - \$5.00 27 Kg. - \$21.50

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,232-2

Empirical Formula C_8H_7N

Name m-Tolunitrile

M. W. 117.15

Description and Constants

Pink liquid

 n_D^{20} 1.5256

b.p. 99-101°/20 mm.

v.p.c. 99+%



Literature

Functional Groups N

Handling and Shipping

Price 100 g. - \$5.00

500 g. - \$15.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,673-5

Empirical Formula $C_9HCl_3N_4$

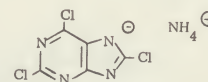
Name 2,6,8-Trichloropurine, ammonium salt

M. W. 240.48

Description and Constants

White powder

m.p. 163-167°



Literature

Functional Groups Py
Hal-5

Handling and Shipping

Price 1 g. - \$9.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,904-6 Empirical Formula $C_2H_5F_3N_2$

Name 2,2,2-Trifluoroethylhydrazine
(70% aqueous solution)

M. W. 114.07 (anhydrous)

Description and Constants

Colorless liquid

n_D^{20} 1.3610

Chemical structure: CF3CH2NHNH2

Literature

Functional Groups Hal-1
Hz

Handling and Shipping

Price 5 g. - \$5.50 25 g. - \$18.00

Set No. 110 12/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,510-0 Empirical Formula $C_{18}H_{15}PS$

Name Triphenylphosphine sulfide

M. W. 294.36

Description and Constants

White powder

m.p. 162-164°

Chemical structure: c1ccccc1P(S)(c2ccccc2)c3ccccc3

Literature

Functional Groups Phos

Handling and Shipping

Price 25 g. - \$3.50 100 g. - \$10.00 Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,598-3 Empirical Formula $C_{12}H_{12}O_6$

Name Trimethyl 1,3,5-benzenetricarboxylate

M. W. 252.23

Description and Constants

White powder

m.p. 145-146°

Chemical structure: CC(=O)Oc1cc(C(=O)OC)cc(C(=O)OC)c1

Literature

Beil. 9, 979

Functional Groups Es

Handling and Shipping

Price 25 g. - \$3.50 100 g. - \$10.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 11,980-6 Empirical Formula $C_{34}H_{28}N_6O_{14}S_4$

Name Trypan blue

M. W. 960.81

Description and Constants

Blue crystals

m.p. > 300°

Used as a biological stain.

Chemical structure: CC1=CC=C(C(=C1)/N=N/C2=CC(=C(C(=C2)N)N)N)N3C(=C(C(=C3)N)N)S(=O)(=O)N4C(=C(C(=C4)N)N)S(=O)(=O)N5C(=C(C(=C5)N)N)S(=O)(=O)N6C(=C(C(=C6)N)N)S(=O)(=O)N

Literature

C. I. Number 23850

Functional Groups Am II
Az
P
S-3

Handling and Shipping

Price 100 g. - \$8.00

Set No. 109 11/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 12,746-9 Empirical Formula $C_{16}H_5N_5O_6$

Name (2,4,7-Trinitro-9-fluorenylidene)-malononitrile

M. W. 363.25

Description and Constants

Yellow crystals

m.p. 265-267°

Used as a reagent for aromatic hydrocarbons and amines.

Chemical structure: O=[N+]([O-])c1ccc2c(c1)c(c3cc([N+](=O)[O-])cc([N+](=O)[O-])c3)c(C#N)C#N2

Literature

J. Org. Chem. 30, 644 (1965)

Functional Groups Fl
N
Nit

Handling and Shipping

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No. 13,471-6 Empirical Formula $C_4H_6O_2$

Name Vinylacetic acid
(3-butenic acid), tech., 80%

M. W. 86.09

Description and Constants

Colorless liquid

n_D^{20} 1.4249

b.p. 169°

Chemical structure: CC(=O)C=C

Literature

Functional Groups Ca-1

Handling and Shipping

(Catalog 13 item)

Price 25 g. - \$9.00 100 g. - \$25.00

Set No. 111 12/30/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,509-7 Empirical Formula $C_{18}H_{15}Cl_2Sb$

Name Triphenylantimony dichloride
(triphenylstibine dichloride)

M. W. 423.98

Description and Constants

White crystals

m.p. 144-146°

Chemical structure: ClSb(Cl)(c1ccccc1)c2ccccc2c3ccccc3

Literature

Functional Groups O, M, -5

Handling and Shipping

Price 25 g. - \$3.50 100 g. - \$10.00 Catalog 13 item.

Set No. 108 11/15/66 PLEASE ORDER BY BOTH NAME AND NUMBER



No. 13,606-9 Empirical Formula $C_{10}H_{18}O_2$

Name Vinyl 2-ethylhexanoate
(stabilized with 35 ppm hydroquinone)

M. W. 170.25

Description and Constants

Colorless liquid

n_D^{20} 1.4267

v.p.c. 99%

Chemical structure: CCCCC(CC)C(=O)OCC=C

Literature

Functional Groups Es

Handling and Shipping

Price 500 g. - \$3.25 2 Kg. - \$8.00

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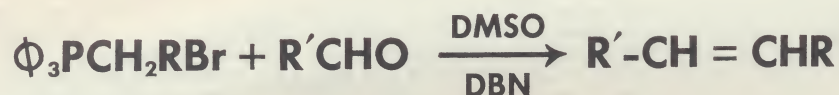
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A theory to account for the polarization of the fluorescence of macromolecules (1) was examined using the fluorescent conjugates of ovalbumin and bovine serum albumin prepared by the reaction of the proteins with 1-dimethylaminonaphthalene-5-sulfonyl chloride (DANSYL) at 0–3° and pH 7.5 and by removal of excess of reagent and its products of hydrolysis by dialysis or by ethanol precipitation of the protein conjugates (2). DANSYL was found to be suitable for the determination of N-terminal amino acids of proteins and peptides

at levels of 10^{-3} μ mole of peptide, i.e. 100 times lower than can be used with the fluoro-2,4-dinitrobenzene reagent (3). With this procedure, in combination with the Edman method of stepwise degradation of the N-terminal residues of a nonapeptide, a sequence of 6 amino acids was determined using only 0.02 μ mole of peptide (4). A general method for paper chromatography and electrophoresis of DANSYL-amino acids (5) was modified for thin-layer chromatography in one (6) and in two dimensions (7, 8). Two-dimensional thin-layer chromatography of DANSYL-amines has also been described (9). An improved solvent system permits resolution of DANSYL-val, -leu and -ile on thin layer chromatograms (10).

Preparation of the DANSYL-derivatives of chymotrypsinogen, α -chymotrypsin and diisopropylphosphoryl- α -chymotrypsin made possible the conclusion that a single DANSYL group binds at the active centre of the enzyme, but that the DANSYL-chymotrypsinogen conjugate can be activated with trypsin (11). These studies were recently extended using fluorescent substrates and inhibitors such as DANSYL-D-try ethyl ester (12). Fluorescence of DANSYL derivatives was used in structural studies of bovine growth hormone (13, 14) and thyroglobulin (15) and in a study of the L-chains of antibodies (16). The ATPase activity of myosin A was markedly depressed, while some of the capacity to bind actin remained, when 1 mole of DANSYL was bound per mole of myosin A (17). Rennin was also inactivated by the binding of a single residue of DANSYL per mole of enzyme (18). The DANSYL method of determining N-terminal groups was recently applied to numerous peptides resulting from tryptic hydrolysis of Δ^5 -ketosteroid isomerase (19). In all, DANSYL is a most versatile and useful reagent.

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First synthesized (1) in 1869, hydroxyurea was shown to possess activity against leukemia L 1210 in mice on oral or intraperitoneal administration (2). A new method was used in clinical trials of hydroxyurea in order to determine the optimal dosage schedule (3). Clinical trials indicated that it is effective in reducing counts of leukemic cells without generally producing remission (4), but that it is active against only a few selected solid tumours, including some melanomas (5, 6). Bone marrow depression appears to be the greatest limiting factor in the use of hydroxyurea (3, 6). Concomitant with the clinical trials there appeared reports of studies of the metabolism of the drug (7) and of its inhibition of DNA synthesis in ascites tumor cells (8) and in rat liver (9-12). Hydroxyurea as well as hydroxyurethane induced chromosome breaks in cultures of normal human leukocytes (13). Hydrolysis of hydroxyurea by urease leads to irreversible inhibition of the enzyme (14, 15). Hydroxyurea, hydroxyurethane and acetohydroxamic acid were teratogenic in the hamster and the rat (16, 17).

Hydroxyurethane was found to be almost as active as hydroxyurea against leukemia L 1210 (18) and to inhibit Shope fibroma virus (19). On the other hand hydroxyurethane has been observed to be carcinogenic in mice (20, 21), possibly due to its conversion to urethane (22). The relationship between antitumor activity and structure of hydroxyurethane and hydroxyurea has recently been discussed (23). Recent use of hydroxyurea in patients with chronic myeloid leukemia gave encouraging results (24). But perhaps the most interesting findings are that hydroxyurea is bacteriostatic for *Escherichia coli* due to inhibition of DNA synthesis (25), and that the yields of infective *Vaccinia* and *Herpes simplex* viruses growing in cell cultures are sharply reduced by addition of hydroxyurea (26, 27). In view of the recent report that cupric ions potentiate the action of 2-keto-3-ethoxybutyraldehydebis (thiosemicarbazone) on sarcoma 180 ascites tumor cells in mice (28), it would be of considerable interest to determine whether a similar effect occurs with hydroxyurea.

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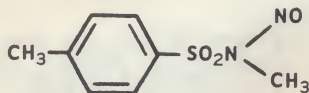


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The following is abstracted largely from Rec. trav. chim. 73, 229 (1954) and from the Ph. D. thesis of Dr. T. J. de Boer, Groningen, 1953.

I. Preparation of ethereal-alcoholic solutions of diazomethane:

Ethanol (95%, 25ml) is added to a solution of potassium hydroxide (5 g) in water (8 ml) in a 100 ml distilling flask fitted with dropping funnel and an efficient condenser set downward for distillation. The condenser is connected to two receiving flasks in series, the second of which contains 20-30 ml ether. The inlet tube of the second receiver dips below the surface of the ether, and both receivers are cooled to 0°.

The flask containing the alkali solution is heated in a water bath to 65°, and a solution of 21.5 g (0.1 mole) of Diazald® in about 200 ml of ether is added through the dropping funnel in about 25 minutes. The rate of distillation should about equal the rate of addition. When the dropping funnel is empty, another 40 ml of ether is added slowly and the distillation is continued until the distilling ether is colorless. The combined ethereal distillate contains about 3 g of diazomethane.

Diazomethane is not only exceedingly toxic, but its solutions have been known to explode quite unaccountably. Hence, ALL WORK WITH DIAZOMETHANE, regardless of how it is generated, SHOULD BE CARRIED OUT BEHIND SAFETY SHIELDS IN EFFICIENT HOODS.

In most reactions of diazomethane, the presence of ethanol is not harmful; in some, a promoting influence is reported¹. If the acid chloride is not too reactive, even the Arndt-Eistert reaction can be carried out in a medium containing alcohol². In the reactions of diazomethane with reactive acid chlorides, with aldehydes, and in a few other reactions³, ethanol must be absent. Procedure II is then used.

II. Preparation of alcohol-free ethereal solutions of diazomethane:

2-(2-Ethoxyethoxy)-ethanol, our No. E455-0, (35 ml) and ether (20 ml) are added to a solution of potassium hydroxide (6 g) in water (10 ml). This solution is placed in a 100 ml long-necked distilling flask fitted with dropping funnel, efficient condenser, and water bath at 70°. As the distillation of the ether starts, a solution of 21.5 g of Diazald® in about 200 ml of ether is added through the dropping funnel over 20 minutes. During the distillation, the flask is occasionally shaken vigorously. The ethereal diazomethane is collected in the same manner as in I. The yield is identical.

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Since the application of gas chromatography to the resolution, identification and estimation of some 100 carbohydrates and related polyols in the form of their trimethylsilyl- (TMS-) derivatives, prepared by action of hexamethyldisilazane and trimethylchlorosilane on the parent compounds (1), the preparation of TMS-derivatives and their gas chromatographic analysis have been extended to almost all classes of water-soluble substances of biological interest. The armory of silylating agents has now been extended by the introduction of bis-(trimethylsilyl)-acetamide (BSA) (2,3). Many modifications for making the TMS-derivatives of carbohydrates have been described (4,5), including the use of sorbitol as internal standard (6). TMS-carbohydrates have been found suitable also for thin-layer and column chromatography (7) as well as for synthetic work (8). Gas chromatography has been extended to the analysis of the TMS-derivatives of sugar phosphates (9,10), hexosamines (11), hexosaminols (12) and anhydroglycoses (13). While initially TMS-amino acids were used largely for syntheses (14), the quantitative gas chromatography of TMS-amino acids has been reported (15). Gas chromatography of the TMS-derivatives of Krebs cycle acids (16) and of biological

amines (17) has also been described. An interesting application is the optical resolution by gas chromatography of the TMS-derivatives of polyfunctional amino acids (18). A comprehensive investigation showed that it is possible to prepare quantitatively the TMS-derivatives of the nucleic acid bases as well as of the nucleosides and to analyze them satisfactorily by gas chromatography (19). Phenanthrene was used as internal standard in this procedure. Recent papers describe the gas chromatography of the TMS-derivatives of anthraquinones (20), phenolic acids (21), flavonoids (22) and sphingosines (23). In the case of some pesticidal carbamates and ureas, preparation of the TMS-derivatives was shown to be advantageous: thus in the case of α -naphthyl N-methylcarbamate thermal breakdown was retarded and better symmetry of peaks and less tailing resulted than with the parent compound (24). Thus the method is also useful for lipophilic compounds and has been applied for the gas chromatography of the TMS-derivatives of tocopherol and the methyltocopherols (25) as well as for the gas chromatography of various TMS-sterols (26,27). Apart from the examples of syntheses with TMS-derivatives mentioned, they have been used in numerous organic reactions (28).

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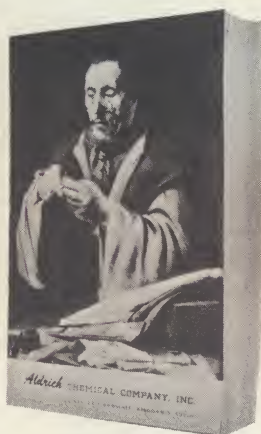
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